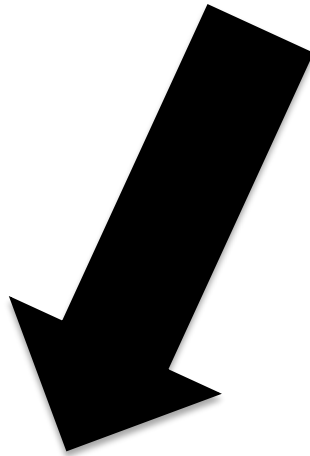


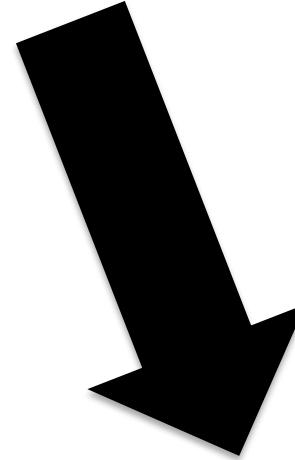
# **Transitioning Research to Improving NOAA Sub-seasonal Forecast Products**

# Subseasonal NMME Project



## Real-time Pilot

*Goal: Demonstrate Capacity*



## Re-forecast Experiment

*Goal: Provide a basis to support research for improving subseasonal products with link to real-time*

- Set of hindcasts
- Case studies

# Re-forecast Experiment Protocol – Critical Issues

1. Length of hindcast (1995-2015? Longer?)
  1. Initialize all months
  1. Minimum 45-days
  2. Coupled or atm-only models?
    1. Atm, ocn, land initialized
    1. Method of initialization ??
    2. Frequency of Initialization(at least 1xper week)
      1. Number of perturbations/ensemble members?
      2. Method of perturbations (burst vs. lagged)?
    3. Resolution?

# Case Studies

- 1. Large # of ensemble members
- 1. High resolution
- 1. Variables that could be used for downscaling
- 1. Test issues of high top, initialization strategies & many other scientific questions discussed

# Real-time Pilot Project

- Build upon RMM reforecast experiment (Pegion and Kirtman) and apply in realtime for a finite length of time (a few months)
- Reduced data required (U850, U200 and OLR, 15N-15S averaged), testing with constraints the increase in operational tempo and finally contribute operational MJO assessment activity

*Requirements: will need to build up subset of re-forecasts first for this pilot project*